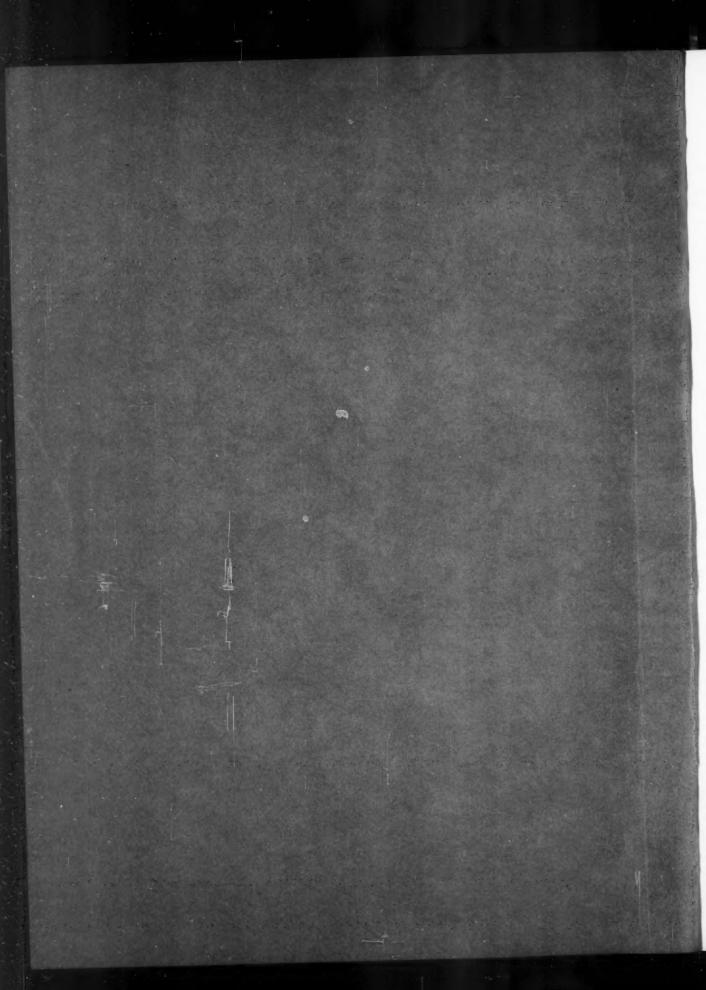
THE JOURNAL OF THE ACADEMY OF MANAGEMENT

AUGUST, 1957



THE ACADEMY OF MANAGEMENT

PROCEEDINGS OF ANNUAL MEETING - 1956

and

JOURNAL OF THE ACADEMY OF MANAGEMENT



FORWARD

The first section of this publication includes the papers and the proceedings of the annual meeting of the Academy of Management, held at Western Reserve University in Cleveland on December 28, 1956. The second section presents the first edition of a journal for the Academy which includes articles and notes written by and for Academy members. The purpose of this experiment with a journal is to provide a forum for the discussions of matters of mutual interest to our members.

The organization and editorial work in connection with this new publication has been performed by our Research and Publication Committee and the editor, Paul M. Dauten, Jr. The committee is composed of Professors M. J. Mandeville, Chairman, Robert E. Brecht and Dalton E. McFarland. The officers of the Academy extend their sincere appreciation to the members of the committee and to the editor for their efforts in establishing this journal. Support from the Academy members for the publication has been highly satisfactory.

Another matter of immediate interest to the membership is the date of our annual meeting. The results of surveys conducted in 1956 and 1957 indicate that more of our members prefer to meet in late December than at any other time, and more prefer to meet in December than in early September. Consequently, our annual meeting in 1957 will be held in Philadelphia on December 28.

Joseph W. Towle Secretary-Treasurer Copyright - 1957

JOSEPH W. TOWLE

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The Academy of Management

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St. Louis, Missouri

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NOTE: (The Academy was organized on an informal basis from 1936 to 1940 and was inactive because of World War II from 1942 to 1946.)

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PROGRAM OF THE ACADEMY OF MANAGEMENT

Meetings, except as shown otherwise, are held in the "Court Room" of the
Law School Building, Western Reserve University, on Adelbert
Road across from the Armory.

Friday, December 28, 1956

9 a.m.
Tudor Arms Hotel
10660 Carnegie Avenue
(About 30 minutes by bus
from downtown Cleveland.)

Electronics in the office—How and When. C. I. Keelan, Johns-Manville Corporation.

10:30 a.m.

Approaches to Training Administrators.

Charles E. Summer, Columbia University.

Comment by — Keith Davis, Indiana
Franklin Folts, Harvard
Edward Watson, Northwestern

12:15 p.m.

Luncheon

1130 p.m.

A Preliminary Statement of Principles of Planning and Control. Harold Koontz, University of California at Los Angeles.

3:00 p.m.

Extent of Dependence on Cases in Teaching Management Principles. Panel:
Ralph C. Davis, Ohio State University
William H. Newman, Columbia University
William R. Spriegel, University of Texas
Chairman: Ronald Shuman, University
of Oklahoma

4:30 p.m.

Business Meeting

6:30 p.m.
Tudor Arms Hotel
10660 Carnegie Avenue

Dinner of Fellows of the Academy

PARTICIPANTS 1956 MEETING

ACADEMY OF MANAGEMENT

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ELECTRONIC DATA PROCESSING SYSTEMS

C. I. Keelan
Johns-Manville Corporation

I shall get into my subject with a minimum of preliminaries, inasmuch as the time allotted me is short. If I run over, I shall have to answer to the program chairman, who is the Vice President for Finance of my company; the Vice President for Finance of my company is my boss.

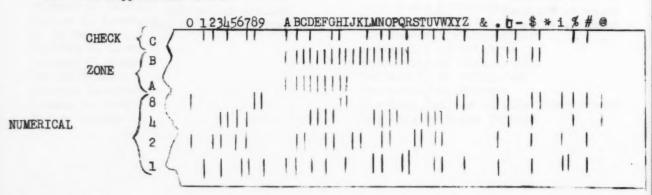
I should tell you that I know little about electronics; I am not an electronics engineer, nor do I know anything about advanced mathematics. I know in general what these machines will do, but I don't know how they do it. The purpose of this statement is to deter you from asking me too many questions that I can't answer.

My talk is divided into two parts: a brief explanation of how these devices can be made to do office work; and secondly, how we studied their desirability for our company.

I have allotted myself 25 minutes to explain how the devices do office work; as the shortest explanation by a manufacturer takes two days, you will, I am sure, be tolerant if my explanation appears a little sketchy. Further, I am sure many of you know much more about these machines than I do; from these I ask a large measure of patience.

The language of the machine is usually binary code. The binary system has two digits instead of the ten of the decimal system. The digits are represented symbolically by 1 and 0. 1 indicates the presence of an electrical charge, and 0 the absence of a charge; or 1 indicates an "on" condition, and 0 an "off" condition. Thus the two conditions of a vacuum tube or similar unit can be made to signify the two digits of the binary system. I am told that this permits many economies in the design and manufacture of a computer.

The coding system for the IBM 702 is explained on this sheet; you received a copy at the door.



You will note that going lengthwise the tape, there are seven paths; these are called channels. The first four permit us to code numbers; the next two in conjunction with the first four give us codes for letters and miscellaneous symbols. To read the characters represented, you read vertically. Thus a 7 is a charge in the channels for 4, 2, and 1; A is a charge in channels 1, A, and B. The last is a checking channel and we need not be concerned with it here. A mark indicates a charge or spot on the tape. Absence of a mark (symbol 0) indicates no charge.

Data are put on the magnetic tape by a tab card-to-tape converter, or in the case of univac machines, by a special typewriter.

The tapes are fed into a computer and are read. A reading device scans each channel and tells the computer whether there is or is not a charge at each location on the tape. Thus the pattern of charges and no charges on the tape is reproduced exactly in the memory of the computer.

The memory may be a magnetic drum, electrostatic tube, magnetic cores, etc. It is divided into segments which hold a digit or letter (remember that each digit or letter is composed of seven locations, each having a charge or no charge). Those segments are assigned numbers and the number is their address. It serves the same purpose as a street address. We read data into designated segments of the memory. When we need the information, we call them out by using the numbers of the segments where it is stored.

In addition to storing data in the memory, we also store there our program by first recording it on magnetic tape. A sample program will be illustrated later.

The next component we meet is the arithmetic unit. This will add, subtract, multiply, divide, and compare numbers. This ability to compare numbers enables the machine to do some seemingly complex office procedures and gives rise to the talk about the machines that think. I shall illustrate this point later.

The program tells the machine to take data from certain places in the memory, put the data in the arithmetic unit, do the arithmetic, and bring out the answer and store that in a certain place in the memory.

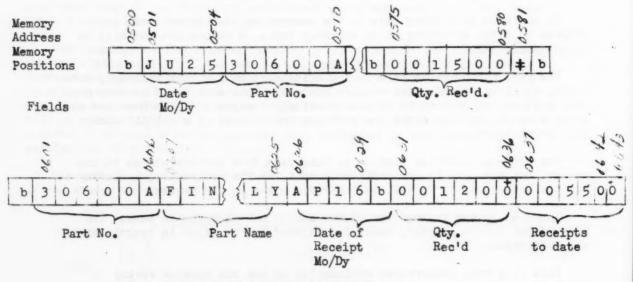
Then the answer is read out of the memory onto a magnetic tape. The tape is put into a printer, read, and printed out on paper in symbols we all understand.

This is a very abbreviated explanation of how the machine works. I think the explanation would be considerably enhanced by an illustration of a simplified program.

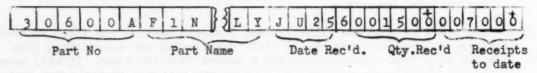
Before I go into the illustration, I should mention the speed of these devices, as speed is undoubtedly their outstanding characteristic. The IBM 705 will read 15,000 characters a second from the tape. It will make 1,750,000 comparisons in a minute. These statistics illustrate the fact that the speed of these devices is fantastic.

Now for the sample problem.

	INSTRUCTION		ARITHMETIC UNIT
	Oper.	Address	
0004	Sel	0100	
0009	Read	0501	
0014	Load	0510	30600 A
0019	SEL	0200	
0024	Read	0601	
0029	Comp	0606	
0034	Tr. Eq	0054	
0039	SEL	0201	
0044	Write	0601	
0049	TR	0019	
0054	LOAD	0504	JU 25
0059	UNLOAD	0629	
0064	R Add	0580	001500
0069	Store	0636	
0074	Add Mem	0642	
0079	SEL	0201	
0004	Write	0601	
0089	TR	0004	



NEW INVENTORY CONTROL RECORD



- 000h. Select card reader 0100.
- 0009. Read stock receipt card into memory.
- 0014. Load part number from the card record.
- 0019. Select tape unit 0200.
- 0024. Read the inventory control record into memory.
- 0029. Compare the receipt part number with the inventory control part number.
- 0034. When part numbers are equal, transfer to the program for adjusting the inventory record.
- 0039. When the cards are not equal, select tape unit 0201.
- 0044. Write out the inventory record on new tape. Receipt balances have not been affected.
- 0049. Transfer to read in another inventory record from tape unit 0200.
- 0054. Load date received from card.
- 0059. Unload date into the inventory control record.
- 0064. Reset and add the quantity received from the card.
- 0069. Store quantity received in inventory record.
- 0074. Add quantity to the receipts-to-date field.
- 0079. Select tape unit 0201.
- 0084. Write out the adjusted inventory record on new tape.
- 0089. Transfer to address 0004 and read a new card. Repeat the program.

I now go to the second part of my talk: the manner in which we made out study of computers. This study is commonly called a feasibility study, but I'm sure you'll agree that desirability is a more apt word. The principal question is not whether it is possible to utilize the computers, but rather whether they will improve our earnings.

First we did what others have usually done: we went to schools conducted by manufacturers to learn what we could about the devices, and we sought to learn from other companies who had gone more deeply into the question.

It was soon obvious to us that to determine with a reasonable degree of certainty whether these devices would be desirable, would require a detailed and costly study. By detailed I mean programming step by step the work to

be put on the machine. How else can you know how many machines (don't forget the so-called peripheral machines such as input devices, sorters, converters, and printers) you need, how many shifts you must operate, and how many people are needed? In other words, how else can you estimate your costs with any confidence?

From our own estimate of the situation and from the experience of others, we knew such a study would cost several tens of thousands of dollars (and would require from 12-24 months). We deemed it prudent, therefore, before spending such a sum, to make what we termed a preliminary study, to assess the desirability of making the detailed study. In effect we were seeking the answer to this question: is the thorough study likely to reveal that we should acquire a computer? If the answer were yes, then we would undoubtedly proceed with the detailed study; if the answer were no, we would pause and consider.

To put it another way, before committing ourselves to a large expenditure, we wished to appraise its promise of profitability. I'm sure everyone will agree this is a sound practice, and we saw no reason to waive our usual practice in the case of electronic computers.

We decided on the following procedure for our preliminary study: we wrote in outline form a description of the work (accounting, payroll, and sales analysis, except analysis by customer) now done in our tabulating units in New York City and Manville, N. J. These two locations are only 35 miles apart, so one unit could serve both offices. In addition we described the job of summarizing sales by customer; this job is now done manually but it is the type of job that lends itself to mechanization. (In fact we are presently preparing to put this job on conventional tabulating equipment.) We gave these written procedures to IBM and asked them to estimate for us the cost of doing these tasks on their largest general purpose computer, the 705.

We found that their estimate of the cost (largest item was rental) was slightly lower than our present cost, but the saving was too small, in our judgement, to warrant the cost of a detailed study. We also found that these jobs would not take more than 40% of the capacity of the computer on one shift.

We could have selected other likely jobs to keep the computer busy and tried to estimate the saving, if any, that would result. But this would have been a time-consuming task-remember that this was to be a preliminary study.

We decided that we should investigate the smaller and less expensive computers, since the large one has unneeded capacity. Moreover the small computers have a special appeal in that they permit you to get into the field of electronic data-processing and to learn something of it, without risking an inordinate amount of money.

We asked two manufacturers to estimate for us the cost of performing on a smaller computer, the same jobs considered for the large device.

To put it briefly we found that the smaller computer produced very little saving when compared to conventional tabulating. The job we were doing manually, i.e., summarizing sales by customer, showed a very substantial saving, but we asked ourselves what would happen if this job were put on tab—and the answer was that tab would show a comparable saving. Incidentally, if we had done this in the study of the large computer, it would have shown a loss rather than a small saving.

This illustrates two important points: don't lose sight of the various alternatives; improve what you have and the answer may be different.

Another illustration of these points: we found that we would have to operate the smaller computer 2 shifts. We asked ourselves, therefore, what would happen if we combined our N.Y. and Manville tabulating units and used the equipment of one unit for two shifts. This also showed a very substantial saving—the second shift rental is 1/2 that for the first shift.

It appeared to us therefore that we should go after the savings we could get with our present conventional tabulating equipment, rather than risk a large expenditure for the detailed study.

We reasoned that if we could not show a saving on jobs that are readily mechanized, as evidenced by the fact that they are already done on tabulating equipment, we probably could not do better on jobs not now mechanized. I know this is not necessarily true, as the flexibility of the electronic device permits you to mechanize almost any procedure; but it nevertheless seemed to us a reasonable assumption, as the more difficult a job is to mechanize, the more the mechanical procedure costs.

I know our conclusion is different from that of most others—at least of others who tell about their conclusion. I suspect that people who decide against computers are loath to tell for fear of being branded as backward, unimaginative, or plain scared.

I have no quarrel with those that have gone or are going into this new field. Their conclusions may well be right for their companies.

I am familiar with some studies made by other companies. I have asked myself if their circumstances so differ from ours that different conclusions may be warranted. In the first place, we have no large concentration of people who are performing the same kind of work. Examples of such concentrations are found in insurance companies and utilities. If you have 200 clerks working on getting out the bills for electricity and you can eliminate 150 jobs by using a computer, you're "in business". Further our tab installations are small—on the order of \$5,000 per month rental. If you have a \$50,000 per month tab installation, you may be able to put in a large computer without increasing your rental. Again you're "in business."

Secondly, some companies are using their computers for ordinary office work and for complex mathematical problems such as may arise in research and engineering. These problems can be done during periods when the machine is not

so busy, whereas the usual office job must be done day by day. The saving from solving such problems is therefore obtained at a very small cost. But our research and engineering people foresee few such problems.

I wager that I know what you are thinking right now; you are asking your-selves this question: Why is the saving so small if these machines are so fast and versatile? It's a good question. We have asked it of ourselves and have arrived at this explanation.

First, although the processing speed is fantastic once the data are in the computer, the preparation of input data is no faster and no less costly than for conventional tabulating equipment.

Secondly, as a generalization it is correct to say that computers reduce cost by reducing the human effort required, and increase cost by adding to your machine rental. The large computer will enable you to reduce substantially the number of people required, but its rental is high—say on the order of \$30,000 per month. As an example, if a large computer adds \$20,000 a month to your rental, you would have to eliminate about 50 jobs to break even. As stated previously, we believe the computer should be compared to the most efficient alternative—that usually will be tabulating. Only a very large tab installation would have 50 operators.

On the other hand, the smaller machine has a much more modest rental, but when compared to our tab installation, it would eliminate only a few jobs. It seems that the manufacturers of these devices have an uncanny way of pricing their equipment so that the saving in human effort made possible by a better machine is just about offset by its added cost. I can only conclude that they supply their pricers with sharp pencils.

There is a third factor: we are often prone to overlook the fact that some remarkably efficient computers are available for present tabulating installations. An example is the type 604 which we have at each of our tabulating units. The computing speed of this model compares favorably with that of the 650 (of course, the 650 will perform many operations that the 604 will not).

Please understand that the studies I have described are studies of the computers that have been in the news for the past few years. It is common knowledge that these devices are incredibly fast computers and that their performance in solving complex mathematical problems, rates the adjective marvelous, in its literal sense. The first computers were designed for such problems. The ordinary business task, however, entails the handling of large amounts of information but involves only a relatively few simple calculations. Our sample program illustrates this point. These computers are not nearly so efficient at handling information as they are at computing; I shall attempt to explain why this is so.

These devices had memories that would hold thousands of characters. But the usual business procedure involves millions of characters. This problem was

circumvented by storing the masses of data on magnetic tape or punched cards. The memory was used as a working area for solving a problem after the data had been read in from a master tape (card) and a change tape (card). This meant that all change information had to be sorted into the same order as the information on the master tape. This entails what is called batching the work.

The complex mathematical problem entails small amounts of input and output, but a large amount of calculating. Therefore the memories were adequate for these problems.

If we had a device with a memory that holds millions of characters of information, we could store the master data in the memory and leave them there. As changes came through we would process them immediately without any sorting. The part or item number on the change card would enable the machine to locate that item in memory. This is known as random-access memory. The master data would thus be kept up to date hour by hour. If we could interrogate this memory at any time to find the data on any item, we would have all of the advantages of a card file. Such a device as this would be a data-processor first and a computer second—in other words a machine designed for the ordinary office job.

As many of you probably know, devices such as I have described have recently been introduced. We believe that this change in design is so significant that we have actively reopened our studies. It is too early yet to predict what our conclusions will be.

I can summarize this second portion of my talk by saying that when we get a computer it will be because we are reasonably certain it meets our requirements for improving earnings—we are not interested in "keeping up with the Joneses."

OUTLINE OF ADDRESS AND

PANEL DISCUSSION

FACTORS IN EFFECTIVE ADMINISTRATION *

by Charles E. Summer, Jr.

- 1. Background of the Study
- 2. Purposes of the Study:
 - To isolate the <u>goals</u> of administrative training. These goals are also viewed as <u>factors</u> which contribute to success as an administrator (manager, executive)
 - To re-state these goals in a common language for comparison among schools and courses
 - To organize this common language in a framework useful for training
 - 4) To give "by-product" indication of training methods.
- 3. Why these purposes are important:
 - 1) To plan curricula, courses and executive training programs adequately. A curriculum is a combination of specific goals of training; a course is a subsidiary group of goals. Therefore, to plan both courses and curricula we have to know "what we're driving at."
 - 2) Many universities are asking "what is this thing administration?"
 - To throw light on the more general question of what makes a good executive.
- 4. How the Study was conducted.

SOME BROAD CONCLUSIONS

- 1. There is a "field" of administration emerging. It has been put into curricula for the most part in the last six years.
- 2. The "field" of administration can be thought of as a group of training goals, in terms of a) knowledge goals, b) attitude goals, and c) ability goals. In the judgment of the author, these appear to be roughly equal in importance in total executive effectiveness.

^{*}This report is available from the author at the Graduate School of Business, Columbia University.

3. Everyone agrees that the field includes these three kinds of factors,

1) There is diversity in their relative emphasis

- 2) There is diversity within each category as to what knowledge, which attitudes and which abilities should be emphasized
- 3) Many of the goals had never been verbalized before this attempt, even by those who stress them.
- 4. Most schools seem to steer a middle course in distributing their efforts among knowledge, attitudes and abilities.
- 5. A few schools seem to place heavier relative emphasis on knowledge, and less emphasis on attitudes and abilities.

 - There are diverse reasons for this, some more valid than others
 There is inherent danger in overdoing the knowledge approach, neglecting attitudes and abilities.
- 6. A few people tend to place more emphasis on attitudes and abilities, with relatively little attention to knowledge.
 - 1) There are diverse reasons here, too, some more valid than others
 - 2) There is danger in overdoing the attitude and ability approach, neglecting knowledge.
- 7. There is no general pattern of knowledge which individual schools emphasize. A given school might emphasize any one or a combination of the following general categories.
 - Integrated Viewpoint of Operating Functions: differs from traditional approach to sales, production, finance, etc. in that it provides a) checklist overview of general management problems, and b) stresses relationships between compartments.

- Processes of Administration: stresses job or functions of administrator as opposed to operating functions. Comes nearest, in some forms, to providing a comprehensive theory of management -

incorporates other types of knowledge.

- Organizational Behavior: a social science approach. Provides understanding of behavioral concepts and some prediction. Not directly applicable in terms of what administrator does to use the knowledge for control purposes - depends on ingenuity here.

- Human Relations Knowledge; includes organizational behavior plus individual behavior, may in some cases include techniques. A

very wide diversity.

- Knowledge for Social Responsibility: based on economics in some cases, on philosophy and theology in others.

- Decision-Making Methodology: logic, scientific method, creative

method. Wide diversity as to the depth and detail.

- Quantitative Tools for Decision-Making; ranges from traditional

accounting and statistics, to integration of these with marginal economics, to advanced mathematics — operations research, linear programming, theory of games, etc.

- 8. There is fairly wide agreement on the attitudes which are sought in administrative training (though there are one or two prominent points of diversity). Here are some of the principal ones:
 - Intellectual and Creative Attitudes of Decision-Making
 Necessity for art, skill, wisdom and judgment, even with
 knowledge
 Predisposition for imaginative, critical approach

Necessity for action and assumption of risk

The limitations of quantitative method, its importance when possible Objectivity in decisions.

- Attitudes of Effective Human Relations
Willingness and predisposition for understanding behavior
Objectivity in understanding one's self
The relationship between efficiency goals and human needs.

- Other Attitudes
Social responsibility, industry and initiative, etc.

- 9. The interviews showed that many people are devoting considerable effort to attitude development, even though they were not entirely conscious of this.
- 10. Some people are opposed to attitude development for fear it is "brain-washing." This seems valid for some attitude types, but prevents adequate training if applied to all types.
- 11. Most people agree that there are certain abilities which can be partially developed in the university (though a few hold opposite views).
 - Analytical and predictive ability in decision-making

- Methodological ability in decision-making

- Creative ability in decision-making

- Ability to understand communications of others, and to communicate effectively with others
- Ability to assume the leadership function in groups

- Ability to learn from experience.

12. Even though there is agreement on these types of abilities, there is considerable disagreement as to whether they are

- Arts: to be developed without the aid of knowledge, principles and methods (or)

- Skills: to be developed by habitual practice with the aid of conscious knowledge (this approach would still allow for judgment and wisdom)

13. Today there is no such thing as the case method. There are many types.

- The case method seems to be used as much for understanding of knowledge previously developed by other means, as for complete "selfdiscovery".

- For certain abilities (art, skill, wisdom, judgment), some form

of the case method is a necessity.

- Both knowledge and direct experience can be used for attitude development.

- All of the schools use some form of case method.

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Comments of Franklin Folts, Harvard University -

Mr. Chairman:

May I thank your Program Committee for providing me with the opportunity to congratulate Mr. Charles E. Summer, Jr., the researcher and author of Factors in Effective Administration. At the outset, however, I must disagree with him. He has told us that we will find this research report difficult to read and has implied that we may find it dull at times. To me neither of these statement is true. The report is not difficult to read. I think that from the start it will hold your attention because it deals with matters vital to every one of us. It is worthy of our study. It brings together for the first time important facts in a most useful framework. True it will prowoke occasional disagreements but it is at these points that it constitutes a challenge to use. It most definitely points the way for hard, serious consideration of what we as teachers of management actually are doing, what we could be doing to improve our use of what we have and know. It makes clear how much more we need to know, our need for much more research. To me Factors in Effective Administration makes a useful and significant contribution. The Academy of Management can take pride in its sponsorship of an activity that has produced results of such importance.

May I take my five minutes on this panel to make clear the area of management in which this study makes its contribution. We all recognize that a successful manager must possess and practice two distinctly different kinds of skills. One of these categories is made up of skills that are unique to each business function. I refer to the accounting and statistical skills of the controller, the financial skills of the treasurer, the technical skills peculiar to the factory manager, the varied analytical skills of the sales manager — and so on through the list of manager specializations. Within each of these functional areas there is need of skills quite unlike the skills special to each of the other areas. Each operating manager must practice a set of skills that are unique to the functional area of business in which he operates.

In addition every manager must possess and apply a second group of skills

that are wholly unlike the skills of the functional specialist. These make up the second of the two categories of skills mentioned. In the first place these skills are common to all managing. They do not differ as do the skills of functional specialization. Not only are they common to all areas of managing, they exist unchanged except for variation in relative time consumption at all levels of the managing structure. Wherever managing goes on, be it at the President or Foreman level these skills are requisite to successful practice. These are skills that are unique to all managing as a human activity.

These skills long have been known. While they have been designated by various terms essentially they embrace the following four activities:

- 1 Planning
- 2 Organizing and manning
- 3 Integrating and motivating
- 4 Auditing

All managing includes these four types of work. The portion which each is of the whole varies with the scope, span and depth of a manager's responsibility. But in varying degrees they always make up the work of the manager as a manager.

What determines the degree of excellence with which a man manages? This is the question to which Mr. Summer's research provides an answer. He reports his findings in a three-part structure: knowledge, attitudes, abilities. These three long have been recognized as the keys to proficiency as a specialist in a line or functional activity. The significant contribution of Factors in Effective Administration is its clear demonstration of the character and importance of this three-element differentiation in the area of managing as a set of skills apart from the various technologies of the specialists. Knowledge of, attitudes with respect to, abilities of application within the areas of planning, organizing, motivating and auditing - this is the focus of Mr. Summer's findings that are of major significance. By so directing our thinking on a forward locking basis Mr. Summers has provided us with much.

Factors in Effective Administration details the work of teaching managing in some 20 Schools of Business Administration. It presents these findings in a structure which probably is much more logical, explicit and complete than will be found in the work of any one of the 20 Schools, studied. It presents a picture of what is being done in these institutions individually, and by its composite structuring suggests what might be accomplished in the way of progress.

If a School of Administration proposes to train people to manage effectively it clearly must concern itself with the abilities the manager must possess to manage well. Any one who is concerned with manager development will find this report revealing, thought provoking and, one would hope, action stimulating. I feel certain that you well agree with me that we who are teachers of management owe a vote of thanks to Mr. Summers and to the foundation that made this study and report possible.

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Comments of Keith Davis, Indiana University -

Mr. Chairman:

Charles Summer, Bill Newman, and others who helped prepare this study of the teaching of management are to be congratulated for the fine job they have done. This report is a significant contribution to the teaching of management, and it makes very interesting reading. All of us can profit from reading it.

I have many points about the study which I would like to discuss, but for the limited time assigned I have chosen only two areas for comment.

The first concerns the background and history of management. I find very little mention of management history in the Summer study. Assuming the Summer study to be representative of management courses throughout the nation, this raises the question of whether we are underplaying management history. Management is a old as recorded civilization, and those who preceded us have contributed much to our thinking. As we look to the future, we should learn from the past. Management history gives the student a perspective so that he can put ideas and trends into their proper relationship. History helps give the student a sense of the everlasting worthwhileness to society of the management function. From this he develops a devotion to his subject and motivation toward professional competence. This sense of mission and its resulting motivation seem to be the characteristics most lacking in today's management students.

Other professional schools tend to stress history much more than schools of business. As you entered our meeting place today (the Law Building, Western Reserve University) you observed pictures of great jurists and other contributors to law. There were also copies of documents which established basic judicial ideas. Immediately above my head in this auditorium is a painting of a famous jurist a century ago. These things give the law student a sense of mission and professional motivation. Looking now to business schools, I know not even one which in a comparable way displays basic documents or pictures of Babbage, Fayol, Taylor, and others. Why?

With regard to courses the situation is just as uneven. Students who enter medical school must learn medical history, those preparing to be professional economists must take economic history, and so on. But what about those students preparing to be professional managers. It appears that few, if any, of them are exposed to an intensive study of management history. Why?

My second point is perhaps related to the first because it concerns

management philosophy. Referring to the seven management areas classified by the Summer study, one finds that "management philosophy" is not one of them. The report does indicate that bits of philosophy exist here and there in various courses, but there appear to be few, in any, courses devoted primarily to management philosophy. Yet, is not management philosophy the foundation of all management? Management is a value system itself, and managers deal with problems involving other value systems. They must always be making judgments on the basis of some values which cannot be quantified or determined logically; therefore a sound philosophy is imperative.

My experience with management graduates of many universities indicates that few of them have any organized management philosophy, framework, or value system, and even fewer have a workable one. Few of them are able to verbalize freely about management philosophy, and they are hardly able to "hold their own" as they discuss philosophical problems with union leaders, civic leaders, and others. They lack a framework and they lack confidence. I wonder if we are devoting sufficient attention to management philosophy in our curricula? Does "management history and philosophy" deserve classification as the eighth management area in Summer's classification?

* * * * * *

Comments of Edward Watson, Northwestern University -

Mr. Chairman:

At the outset, I would like to pay tribute to Mr. Summer for preparing a document that will be of great help to those who are teaching in the management area.

(1) From Mr. Summer's report, we can see the wide range of views and concepts that are being taught in schools in business. In some instances the concepts are being discussed briefly in class, with no serious attempt made to use them as tools for analysis. Students are, however, expected to develop a way of thinking about administration - although they have had little business experience and are subject to the usual, competing demands of other courses for the student's time. It seems to me that Mr. Summer's report points to our responsibility not only to refine and improve our concepts of administration but also to demonstrate to the students the usefulness of these concepts - certainly the latter is a responsibility of the professor. In this process of evaluating the usefulness of our concepts, Mr. Summer's report will be extremely valuable, since we can now make some comparisons of what is being done at other colleges and thereby view our own particular methods somewhat more critically.

The importance of conceptual schemes to the structure of a course will be brought home to the professor in another way when he becomes involved in a case collection program. Without some guidance as to the underlying purposes of the course, a case writer will not know how to make a selection of materials, and the proportion of good cases will be very low.

(2) Concepts of administration are also important for research. Without some theoretical foundations, research in administration may produce little more than historical accounts of what happened.

While I could not tell from the report the extent to which business schools are engaged in research on administration, I would like to express my belief that the teaching of administration and development of ideas in that field will be uninspiring unless research in the field (not just in the library) is made a continuing part of the program.

- (3) While the Summer report gives a good perspective of how administration is taught in various courses, the report does not compare the "package" of courses relating to administration that must be taken at the various business schools. For example, a student might have to take a course on organization and another on policy, but no course on human problems. The fragmentation of knowledge by courses can often be an obstacle to getting a well-rounded picture of administration. I am aware of the fact that this aspect of teaching was outside the scope of this study.
- (4) A final suggestion. While the Summer report has given us all a much needed look at what the other fellow is doing, we might add to our understanding if we, as a group, picked out a few cases and discussed them from the point of view of "what do we see in the case", "what do we think a student might do with the case", etc. The application of different concepts to a case might reveal aspects that have so far eluded us by the sole application of our own particular methods.

A PRELIMINARY STATEMENT OF PRINCIPLES OF

PLANNING AND CONTROL

BY

HAROLD KOONTZ *

Although I attempt to deal in a preliminary fashion only with a portion of the theory of management, my paper is essentially a plea for more attention to fundamentals in management, to principles, theory, a conceptual framework upon which we can develop the systemized knowledge which is necessary if we are to constitute a science of management. As such, it may appear to be an oversimplification of an extraordinarily complex process. While the need for improving management is widely recognized and a considerable amount of inquiry, analysis, and training of managers is being undertaken in all kinds of enterprise, there is question in my mind as to whether enough attention has been given to the development of a conceptual framework of principles from which to approach this important problem. I fear sometimes that much of the research being undertaken and much of our effort to train managers have been proceeding from the questionable premise that exchange of experience and emphasis on technique are adequate means for attacking the problem.

I do not deny the importance of analyzing experience through case study or research or passing on to managers lessons in the "how-to-do-it". How-ever, I feel certain that greater progress could be made if more attention were paid toward the development of a conceptual scheme of management in all its aspects. By so doing and formulating principles which explain the related fundamentals of management, we not only could have something which could have a predictive value in the varying circumstances which the manager faces, but research in management could be better oriented and consequently far more productive than has, to date, been the case.

That the need for a concept of management and for a framework of related principles has been recognized for some time is evident by the comments of such practical scholars of management as Henri Fayol, Chester Barnard, and Alvin Brown. In his great classic published originally in 1916, Fayol bemoaned the lack of management teaching in vocational schools, but ascribed this to a lack of theory since, as he said, "without theory no

^{*} I am indebted to Dean Neil H. Jacoby and Dr. Lewis C. Sorrell of the University of California, Los Angeles, for penetrating criticism and suggestion in the preparation of this paper.

teaching is possible. Likewise Barnard deplored the lack of literature and instruction for executives and above all the lack of "an accepted conceptual scheme with which to exchange their thought." The importance of principles in understanding and developing the art of management was well understood by Alvin Brown who held that, for the greatest effectiveness, "study must be grounded in principle." And Talcott Parsons incisively put the role of theory in the right perspective when he said:

"It is scarcely too much to say that the most important index of the state of maturity of a science is the state of its systematic theory. This includes the character of the general conceptual scheme in use in the field, the kinds and degrees of logical integration of the different elements which make it up, and the ways in which it is actually used in empirical research." 4

In the field of management, then, what is needed is groupings of interrelated principles—theory if you will—dealing with the various aspects of the managerial job. Some of the principles which comprise a theory of management can be readily recognized from the observation of management experience, others may be offered as hypotheses subject to verification, and still others will be discovered and codified as the analysis of the management process continues. But, unless these principles are clearly related to the job of management, hung logically and in an orderly fashion on the tree of managerial knowledge, their true import cannot be comprehended, their usefulness in practice restricted, and their help in giving a guiding light for research limited.

As can readily be seen, principles and art are not mutually exclusive fields of endeavor. As principles are discovered, verified, and applied in solving problems, they become the working rules of an art. While management will ever be an art and perhaps will always be comprised largely of know-how, improvement of the art of management and removal of many of the uncertainties in this complex area of almost incomprehensible variables will depend heavily on the discovery, codification, and verification of principles.

Principles describe the nature of the managerial job, crystallize the purpose of management, and act as a kind of checklist for the manager to

¹ General and Industrial Management (New York: Pitman, 1949), pp. 14-15

² The Functions of the Executive (Cambridge: Harvard University Press, 1938), p. 289.

³ Organization of Industry (New York: Prentice-Hall, 1947), p. vi.

⁴ Essays in Sociological Theory, Pure and Applied (Glencoe, Ill.: Free Press, 1949), p. 17

follow in applying the art of management. In so doing, they furnish the basis for seeing the manager's job as a whole and become the cornerstones upon which the training of managers can be undertaken.

In addition, principles increase managerial efficiency. There is probably no more complex a task with a greater number of constantly changing variables than that of the manager. The kind of decision which managers make each day and the complexity of the elements which affect these decisions make nuclear physics seem simple in comparison, as is indicated by the fact that the latter problem can be largely solved by a kind of advanced mathematics which is inadequate for solving most managerial problems. The application of fundamental truths to the job of managing gives help in avoiding chance decisions, often makes unnecessary much laborious research, and leads to solution of many managerial problems, for most managerial problems have recurring elements which yield to the application of principles.

In attempting to develop a theory of management, it has seemed to me that the first conceptual framework on which to hang a system of principles is to divide the managerial job into those functions peculiar to managership. Although this has been done by many persons who have approached the task of management and there are a number of ways of classifying these functions, I have preferred to look upon this job of getting things done through people as involving five basic functions, functions which are different from those of the engineer, accountant, personnel or production expert, or machinist.

These five functions are:

- Planning the selection, from among alternatives, of enterprise objectives, policies, procedures, and programs.
- 2. Organizing the grouping of activities necessary for accomplishing enterprise purpose, the assignment of these activity groupings to managers with the necessary authority for undertaking them, and the establishment of authority relationships horizontally and vertically in the structure to assure the degree and kind of coordination desired.
- 3. Staffing the selection and training of subordinates.
- 4. Directing the overseeing of subordinates in the undertaking of their assigned duties.
- 5. Controlling the measurement and correction of activities of subordinates to make sure that plans are transformed into action.

Mere reference to the functions of the manager disclose areas where great progress in the formulation of principles has occurred and areas where almost no attention has been paid to the development of an interrelated group of significant basic truths. Unquestionably the most matured area of management theory is that of organization. The basics of formal organization, the

principles of authority delegation, and the principles of groupings of activity have been so well recognized and explained that most research and practice in organization show a clear awareness of theoretical implications. This probably accounts, also, for what seems to me to be the management area in which most practitioners do relatively well, although one does not have to look far to find serious deficiencies which arise from a lack of understanding and use of these principles.

While considerable research, evaluation of knowledge, communication of techniques, and exchange of case experience are being undertaken in the fields of staffing, directing, planning, and controlling, there has been little effort to develop theories applicable to them. To be sure, a number of profound inquiries have been made in these areas, many basic truths have been highlighted, and great contributions made, but they lack the consistency and codification found in the area of organization. In other words, while many, if not most, of the principles of staffing, directing, planning, and controlling have been recognized by such scholars as Barnard, Billy Goetz, Albert Hart, Mary Niles, Herbert Simon, Joel Dean, and others, the principles seem to lack the clear framework found in the treatment of organization.

THE NATURE OF PLANNING AND CONTROL

All functions of the manager are interrelated and it is sometimes difficult to ascertain in practice where one function ends and another begins. It is also clearly true that the operating manager engages virtually at the same time in all functions of management. However, planning and control are so closely interconnected as to be singularly inseparable. They may even be referred to as the "Siamese Twins" of management. Certainly no manager can control who has not planned, for the very concept of control incorporates the task of keeping the operations of subordinates on course by correcting deviations from plans. Any attempt to control without planning would be meaningless since no one can tell whether his subordinates are doing what he wishes them to do unless first he knows what his wishes are. Plans thus furnish the standards of control.

Planning is the conscious determination of courses of action designed toward accomplishment of purpose. Planning is, then, deciding; it is, as Billy Goetz has so effectively said, "fundamentally choosing," and "a planning problem arises when an alternative course of action is discovered." Planning is thus looking toward future action and the job of planning is to make things happen which would not otherwise occur.

Management Planning and Control (New York: McGraw-Hill Book Company, Inc., 1949), p. 2.

Control, of course, implies the existence of plans. As Fayol so perceptively pointed out some years ago:

"In an undertaking, control consists of verifying whether everything occurs in conformity with the plan adopted, the instructions issued and principles established. It has for (its) object to point out errors in order to rectify them and prevent recurrence. It operates on everything, things, people, actions."

And, as Goetz has put it so well, "managerial planning seeks consistent, integrated and articulated programs," while "management control seeks to compel events to conform with plans."7

The basic control process is the same regardless of what is controlled. In addition to assuming integrated and clear plans, it must assume sound organization since there must be assurance that necessary and coordinated authority is given to subordinates who are expected to accomplish tasks. Given these prerequisites, the control process, wherever it is applied, involves three steps: (1) the establishment of standards; (2) the appraisal of performance against these standards; and (3) the correction of deviations.

A PRELIMINARY STATEMENT OF PRINCIPLES OF

PLANNING AND CONTROL

In approaching a statement of principles of planning and control and, from their testing, clarification, and expansion, a theory of these closely related functions of the manager, it is useful to group these principles in categories. The principles seem to fall in the logical groupings of (1) those dealing with the nature of planning; (2) those having to do with the structure of plans; (3) those explaining the process of planning; and (4) principles dealing with the managerial function of control. I do not, of course, claim originality for these principles since others have observed most of them in their studies of management.

PLANNING PRINCIPLES: THE NATURE OF PLANNING

It seems to me that a group of four principles explain the nature of planning. They are the principles of contribution to objective, the primacy of planning, the pervasiveness of planning, and the efficiency of plans.

⁶ General and Industrial Management, p. 107

⁷ Management Planning and Control, p. 229

1. Principle of Contribution to Objective: Every plan and all of its derivatives must contribute in some positive way to the accomplishment of group objectives.

This principle derives from the nature of organized enterprise which must have as its raison d'etre the accomplishment of purpose through conscious and deliberate cooperation. Thus, the primary job of the manager must be so to guide, direct, or lead the persons for whose actions he is responsible as to accomplish group purpose. This principle has been strikingly portrayed by Goetz when he said:

"Plans alone cannot make an enterprise successful. Action is required; the enterprise must operate. Plans, can, however, focus action on purposes. They can forecast which actions will tend toward the ultimate objective of economic efficiency, which tend away, which will likely offset one another, and which are merely irrelevant. Managerial planning seeks to achieve a consistent, coordinated structure of operations focused on desired ends. Without plans, action must become merely random activity, producing nothing but chaos."

2. Principle of the Primacy of Planning: Planning is a primary requisite to the managerial functions of organization, staffing, direction, and control.

To a very great extent, one may say that all of the functions of the manager so intermesh that it is impossible to have management without all of them, and thus each is a prerequisite to another. But the planning function plays a unique role. The establishment of objectives is planning and goals are necessary for meaningful group effort. Certainly it becomes necessary for plans to be made to effectuate these objectives before one can know what kind of organization relationships are required, the qualifications of needed personnel, the line or course toward which to direct subordinates, and the kind of control to be applied.

3. Principle of the Pervasiveness of Planning: Planning is a function of every manager at every echelon in an enterprise.

Although the character and breadth of planning will vary with a manager's delegation of authority, it is virtually impossible so to circumscribe a manager's area of choice that he has no discretion in any of his actions. In fact, unless a manager has some function of planning in his job, there is doubt that he is truly a manager. The recognition of the pervasiveness of planning goes far in understanding the fruitless attempt on the part of some students of management to distinguish between policy-making and administration or between the "management" and the administrator or supervisor. While one manager, because of his authority delegation or position in the organization structure, may have more planning work to do or more important planning, or

⁸ Management Planning and Control, p. 63

the policy determinations may be more basic and applicable to a larger portion of the enterprise, the fact is that planning is a function of all managers, whether they be president or foreman.

4. Principle of Efficiency of Plans: A plan is efficient if it, as placed into effect, brings about the attainment of objectives with the minimum of unsought consequences and with results greater than costs.

I am, of course, indebted to Chester Barnard for having so clearly pointed out the applicability of concepts of effectiveness and efficiency to systems of human cooperation. A plan can be effective in the sense that it contributes toward objectives, but it may do so at unnecessarily great cost. The concept of efficiency used is employed in the sense of ratio of input to output, although it goes beyond the usual sense of such inputs or outputs as dollars, man-hours, or units of production, encompassing, in addition, such matters as individual and group satisfactions.

While many managers have followed plans, such as in the acquisition of certain aircraft by the airlines, where the costs were greater than the revenues obtainable, other companies have inefficiently attempted to attain their objectives by the unsought consequences of market unacceptability, such as happened when one of the large motor car manufacturers tried to capture a post-war market by emphasizing engineering without competitive advances in style. Plans may also become inefficient in the attainment of objective by arousing individual and group dissatisfactions. Certainly, many attempts to install management appraisal and development plans have failed because of group resentment to the methods used, regardless of the fact that these methods, if they had been accepted, would have succeeded in the goal of a better quality of management.

PLANNING PRINCIPLES: THE STRUCTURE OF PLANS

A second group of principles relates to the structure of plans. While, as is the case of any statement of principles, there may be other fundamental truths which can be mentioned, I have found four which seem to me to be most significant. These principles, if followed, can go far in tying plans together, in making derivative plans contribute to major plans, and in making sure that planning in one department of an enterprise harmonizes with plans in another part of the business. They may be referred to as the principles of planning premises, timing, policy framework, and planning communication.

1. Principle of Planning Premises: The understanding of and agreement to utilize consistent planning premises by those who engage in planning is a requisite to coordinated planning.

Planning premises are assumptions for the future. They may be fore-

⁹ The Functions of the Executive, p.19.

casts of data of a factual nature or basic policies expected to be applicable to the future. They may be matters internal to the firm or external to it. They may be within or beyond a firm's control. They may even be plans of the firm and often are plans of competitive businesses or those firms supplying or buying from a company. In other words, they are the future to which the manager engaging in planning must fit his plans. They are the stage on which he will play his managerial role.

It can be seen readily that the requisite planning premises will not be the same for every manager at every level and in every type of activity in an enterprise. Some of the premises required for most managers will be the same, others will be shaped by the kind of organizational responsibility he has, and those for managers in lower levels will clearly be shaped by the plans of their superiors.

But, to the extent that it can be done, every manager should have an understanding of the kind of future against which he is to plan. Moreover, these planning premises must be consistent and, in most cases, uniform. For example, despite disagreement among managers as to whether there will be a business recession in the next six months, a given set of plans should proceed upon some uniform premise, even though another set of plans (such as a set held back for use in a given eventuality) may proceed on other premises. While the premises selected may not turn out to be accurate, and a plan may fail for this reason, one can be sure that plans will fail, if inconsistent premises are used. For example, failure will surely occur in the sales manager is allowed to plan for a boom year and the production manager for a recession, or if the production department plans for rapid expansion of output, with increasing inventories and capital expenditures, while the treasurer plans cash needs on the basis of a stable output.

2. Principle of Timing: Effective and efficient planning requires adequate timing horizontally and vertically in the structure of plans.

Most of the advantages of planning premises lie in proper timing, although the understanding and utilization of uniform planning premises may not assure timing. The importance of timing in planning is no where better evidenced than in a complicated assembly line, such as that used for the manufacture of automobiles. The proper blending of chassis, engines, bodies, colors, and accessories in order to achieve the right result of a scheduled car obviously requires timing of the most precise type. While such precise timing is not usually required in other aspects of business planning, I have often thought that, if the mistakes of other managers showed up as readily as the planning mistakes of production managers, the quality of business planning generally would be greatly improved.

What is often overlooked in plans is that timing is a horizontal as well as a vertical matter. It is clearly not enough for the training department to have the right number of operatives trained to utilize a new process or machine, and for the purchasing department to have the machine ordered in time for use when the operatives are ready, while the financial

department remains unprepared for necessary accounting techniques and cash resources.

3. Principle of Policy Framework: Policies establish the framework upon which planning procedures and programs are constructed.

Policies are guides to decision-making. Policies derive from enterprise objectives, which are the most basic of all policies. As such, they are the guides to thinking which lead to operational plans. In doing so, one policy may beget derivative policies as well as procedures, budgets, tactics, and the other constituents of a program.

Policies, it seems clear to me, are a kind of plan. Involving as they do the choice of an alternative for future action, they are an integral part of plans, the guiding rules under which increasingly detailed plans are made as enterprise goals are transformed into action. If it were not for the complexity of most enterprise operations, or if it were possible for detailed action plans to flow immediately and readily from the architect of the enterprise's objectives without going through a hierarchy of managers, policy formulation could conceivably be limited to the task of stating enterprise objective.

But complexity in the definition of tasks to accomplish objectives and in the management structure normally required, and the fact that managers often wish to delay given decisions until faced with concrete situations, require a framework of derived policies which must necessarily be consistent and co-ordinated if resultant programs are to be effective in terms of accomplishing basic objectives.

Policies may be as major as that of a company to finance all growth from profits and as minor as the policy of requiring workers in a machine shop to wear safety glasses. They exist in every aspect of enterprise function and few, indeed, are the managers so low in the organization structure that do not at some time make policy to guide the decision-making of their subordinates. That these various policies must be consistent is often not fully appreciated in practice, as some firms have found to their sorrow when, for example, their policy of promotion from within conflicted with another policy to develop the most competent possible group of managers.

4. Principle of Planning Communication: The best planning occurs when everyone responsible for it has access to complete information affecting his area of planning.

It is difficult to expect a manager at any level to do an effective job of planning unless he has available to him an understanding of enterprise objectives, policies affecting his area of planning authority, plans of others - whether superiors or colleagues - which affect his plans, and other information. One of the best means of obtaining communication of planning information is to have as many managers as possible actually participate in making plans affecting their areas of operation.

Because the practical difficulties of furnishing adequate information

have been so great, because many managers do not understand the true import of this principle, and because in business, at least, internal security is regarded as necessary to avoid loss of information to a competitor, the typical enterprise tends to develop what might be called a "planning gap." The executives at the top of the enterprise may understand the company's basic goals and policies and the workmen at the operating level may understand what is expected of them to turn out a day's work, but there tends to exist a gap between the top and bottom where managers do not understand how their departmental goals and policies tie in with the goals and policies of the enterprise as a whole. Even in a well managed company with which I am familiar, a survey indicated that the most pressing need of the top 50 executives immediately under the vice-presidential level was for knowledge of top management plans. If this gap existed in the second level of command, one cannot help but wonder how severe the gap was at lower levels.

PLANNING PRINCIPLES: THE PROCESS OF PLANNING

Within the process of planning itself, I find a third group comprised of six significant principles, the understanding of which can do much to furnish a basis for the development of a science of planning. These are the principles of alternatives, the limiting factor, navigational change, flexibility, commitment, and strategic planning.

l. Principle of Alternatives: In every course of action alternatives exist and planning involves the selection of the alternative course of action which will best enable the enterprise to realize its goals.

There are almost invariably alternatives to any course of action and planning seldom involves a "Hobson's Choice." In fact the problem normally faced by the manager is that he has so many alternatives open to him as to make the selection of the best alternative an extremely complex task.

It is exactly in the area of the principle of alternatives that the methods of operations analysis, the utilization of higher mathematics, and the use of electronic computing machines play their major roles. By exposing to the manager's view a much wider range of alternatives than heretofore possible and by forcing the manager to construct models so that these alternatives are weighed in the light of carefully perceived goals, these tools of management open the way for a new day in planning.

2. The Principle of the Limiting Factor: In choosing from among alternatives, primary attention must be given to those factors which are limiting or strategic to the solution of the problem involved.

In every problem area there are certain factors which are of strategic importance to determining whether goals will be attained. These may be few or many and they may change over time in a certain problem area, but, at a given time, there are almost invariably a few which will be most strategic to the solution. While an error in choice of a course of action can be made in concentrating only on limiting factors, the complexity of many de-

cisions facing a manager makes it impracticable for him to consider every facet of a problem and the risk involved in overlooking the less important aspects of a problem is usually less than the risk of delayed decisions.

Chester Barnard recognized the importance of this principle when he pointed out that:

"The analysis required for decision is in effect a search for the 'strategic factors' --- The theory of the strategic factor is necessary to an appreciation of the process of decision... The limiting (strategic) factor is the one whose control, in the right form, at the right place and time, will establish a new system or set of conditions which meets the purpose." 10

That this is an eminently practical business planning principle is immediately evident when one approaches a typical business problem. While the horizons of alternatives and the reflection of variables have been considerably broadened by mathematical techniques, models which yield to mathematical solutions in any but the relatively simple business problems can only pick fairly few of the more strategic variables. And, when a manager is faced with a problem for decision making where either certain significant variables are not quantifiable, or where time or resources do not permit the use of operations analysis, he finds his best approach to think through the problem in terms of the limiting factors involved, and solve it in terms of these. It is, as an astute business manager once remarked to me, "all business problems are simple if you can break them down into their most significant parts."

3. Principle of Navigational Change: Effective planning requires continual checking on events and the redrawing of plans to maintain a course toward a desired goal.

It is sometimes erroneously believed that planning freezes action for the future. However, the future is uncertain and unforeseen events, whether changes in operating environment or in goals, may obsolete even the best plans. Thus, effective planning requires that the manager, like the navigator, continually check his course and revise plans to meet the goals desired. While it is true that the commitment of funds or effort may bring elements of inflexibility into planning and plans cannot always be modified with changes of the tides or winds of the future, it is likewise true that no effective manager makes a plan and then proceeds to put it into effect no matter what events occur. Naturally, to the extent that a manager has been able to forecast the future, make premises which are accurate, establish long-range goals, and arrive at planning decisions which are correct in the light of these, plans may need very little change.

¹⁰ The Functions of the Executive, pp. 202-3.

4. Principle of Flexibility: Effective planning requires that the need for flexibility be a major consideration in the selection of plans, although the costs and dangers of flexibility must be weighed against its advantages.

To many planners, the principle of flexibility is the most important principle of planning. The need for flexibility arises from the uncertainty of the future and from the fact that many plans require commitment of funds, policy, or effort for varying periods in the future. Since uncertainty tends to increase as a function of time, the greatest flexibility is required where the commitment for the future is large and cannot be discharged (e.g. in returning outlays of capital plus a return) in a short period of time.

Flexibility involves the ability to change a plan without undue cost or friction, an ability to detour, an ability to keep moving toward a goal despite changes in environment or even failure of plans. It thus applies to the adaptability of plans themselves, while the principle of navigational change applies to the planning process and the need for redrawing plans. While it often happens that the redrawing of plans requires the junking of an inflexible plan, sometimes at heavy loss of sunk costs, it is clear that navigational change is easier and less costly if plans have built-in flexibility.

Although flexibility is usually related in business to the ability to change plans without serious financial loss, it cannot be overlooked that inflexibilities in matters other than financial costs are often encountered. Inflexibilities of policies and procedures, psychological inflexibilities of workers and managers, and social and political regidities often occur to plague the manager who would bhange his plans.

Flexibility is possible only within limits. In the first place, a manager cannot always put off making a planning decision long enough to make sure of the rightness of his course of action in the light of future events. Decisions must often be made well in advance of the environment for which they are required. For example, the decision of an oil company to build a refinery in the Pacific Northwest had to be taken some five years before it was operated and the financial point of no return was reached several years before the management of the company could be certain that this would be an economic venture.

In the second place, built-in flexibility of plans may be so costly that the benefits of hedging may not be worth the cost. Whether a company spends extra money to make a special purpose plant so that it might be used for other purposes if the original program failed to meet expectations, will depend on the costs of doing so and the importance of the risks to be avoided. Moreover, some companies have felt that they could buy flexibility by keeping their resources in that most flexible of all assets - cash - only to find that their competitor has stepped forth with aggressive expenditures and captured the market.

5. The Commitment Principle: Planning should encompass a period of time in the future necessary to foresee the fulfillment of commitments made.

This principle would appear to answer the oft raised question as to how long to plan. Perhaps the most striking aspect of the principle is the planning ahead for a period far enough to anticipate the recovery of costs sunk in a course of action. In fact, I have previously referred to this principle as the recovery of cost principle. But since other things than costs can be committed for various lengths of time and because a commitment to spend often precedes expenditure and may be as unchangeable as sunk costs, it seems appropriate to refer to this guide for the length of the planning period as the commitment principle.

The application of this principle indicates readily that there is no uniform or arbitrary length of time in the future that a given company should plan or for which a given program or any of its parts should be planned. An airplane company embarking on a new jet aircraft should probably plan this program some twelve years ahead, with five or six years for conception, engineering, and development, and as many more years for production and sale in order to recoup costs and make a reasonable profit. An instrument manufacturer might need only plan its instrument revenues and expenses some six months ahead, since this represents the cycle of raw material acquisition, production, inventorying, sales, and collection of accounts. But the same company might wish to see much longer into the future before assuming a lease for specialized manufacturing facilities, undertaking a program of management training, or developing and promoting a new product line.

The planning period will be longer or shorter depending not only upon the length of time it may take to recover costs from an investment or for discharging an obligation under a commitment, but the period will be influenced by the extent to which flexibility has been built into a plan. Thus, a company might be willing to lease a factory for ten years, even though it is impracticable to plan for longer than three, because of the possibilities of subleasing the facilities on a year or two notice. But where the possibilities of flexibility are not great, it is desirable to plan for the entire period of commitment. This almost surely explains why the major oil companies have led the nation's managements in the excellence and length of their long-range planning, for there is probably no investment quite so fully committed as that made in the development of an oil field, the building of pipelines, and the construction of refinery facilities.

6. Principle of Strategic Planning: Effective planning under competitive conditions (i.e. where others are striving for the same goals) requires that the course of action selected be chosen in the light of what a competitor will or will probably do.

This principle has long been followed in competitive industry, although most of the strategic planning so done has been based on hunch or judgment.

¹¹ Principles of Management (New York: McGraw-Hill, 1955), pp. 441-42.

But, in recent years particularly, many managers have come to find out that their planning efforts are inadequate unless, in addition to planning their own courses of action, they, in effect, plan what their competitors will probably do. Then, having done this, and to the extent they foresee what their competitors will do, they may modify their plans in this light and thereby take advantage of competitors! plans.

While some form of industrial espionage may help in strategic planning, mere close watch of a competitor's actions may be enough. However, in an increasing number of instances managers are trying to work out in some detail exactly what the competitor will probably do. The policy of a business firm may be clear and its plan well developed, but strategy may require the shading of plans and policies to meet those of others.

PRINCIPLES OF CONTROL

The fact that there seem to me to be so many fewer basic principles of control than of planning indicates the extent to which control depends upon planning and how it is largely a technique for assuring that plans are realized. These techniques, important as they are to effective control, are usually methods or procedures and arise from the application of principles, but they are not principles per se.

It can be argued that the control function of management tends to coalesce with other functions, notably planning and direction. This is not surprising in the light of the essential unity of management. It indicates only that the functional approach to the managerial job is a helpful tool in the development of a theory of management and not a means of placing managerial functions in airtight compartments.

But it does mean that many of the principles of organization, direction, and staffing which may seem to some to be inherent in control are eliminated from the summary of principles attempted here. Thus, some of the principles of incentive and opportunism, command, authority and responsibility, and many others are more particularly related to these other functions and will not be included in a summary of principles of control. However, there do seem to be four rather basic principles of management control: the principles of strategic point control, organizational suitability, future controls, and direct control.

1. Principle of Strategic Point Control: The most effective control occurs when primary attention is given to those factors which are strategic to the appraisal of performance.

Although total plans furnish the most complete and accurate standards against which to measure performance, it would ordinarily be wasteful for the manager to follow every detail of planning execution and often unnecessary and inefficient for him to watch even every fairly important phase of performance. What he must know is that the plans are being executed in a manner so that

they can be accomplished. He must, therefore, concentrate his attention on those factors of performance which will indicate whether significant deviations are or will occur.

I do not know of any easy guidelines which might be applied by a practicing manager to determine what standards he should have, since selection of standards seems to be predominantly a matter of the managerial art. However, it might be said that the manager can reach his own solution to his problem by asking himself what things in his operations will show him best whether the plans for which he is responsible are being accomplished.

This principle is, of course, akin to Taylor's exception principle. 12

It was Taylor's wise contention that the manager should only concern himself with the especially good and the especially bad situations. But the principle of strategic point control goes farther than Taylor's exception principle. Implied in strategic point control is the idea that there are normally in a situation certain factors which serve as strategic indicators of the quality of planning performance. The manager watches these constantly, even though, admittedly, he need only take action if current or expected performance deviates materially from these factors. Thus, a railroad operations executive may continually watch on-time performance as an indicator of the quality of operations, even though he seldom finds significant deviations. Or, a corporate financial officer may carefully watch levels of receivables, inventories, and cash, constantly comparing them against projections, even though important deviations may not occur often.

In a very real sense, the principle of strategic point control is a refinement and extension of the exception principle. It is true that management by exception makes for managerial efficiency, but if the points at which the manager watches for exceptions can be those which are strategic for planning success or failure, his efficiency can be materially improved. The number of strategic points at which the manager will apply standards will vary with the importance of the plan, the significance of deviations, and the extent to which given strategic points furnish an accurate enough guide for planning performance.

2. Principle of Organizational Suitability: Controls must be designed to reflect organization structure.

Since managers and their subordinates are the means through which planning events must be accomplished and control exerted, it follows that effective controls must be applicable to a manager's authority area and therefore must reflect organization structure. Urwick expresses this idea as the principle of uniformity and emphasizes that "all figures and reports used for purposes of control must be in terms of the organization structure." 13

¹² Frederick W. Taylor, Shop Management (New York: Harper and Bros., 1919), pp. 126-7.

¹³ L. Urwick, The Elements of Administration (New York: Harper and Brothers, 1943), p. 107.

Organization, being the principal vehicle of coordination, is the means for maintaining control and the manager the focal point of control. Consequently, any device of control must be tailored to the organization structure and the information to appraise performance against plans must be suitable to the position of the manager who is to use it. While this has come to be recognized fairly well at lower levels of organization, especially since cost accountants and others have learned that data which did not fit organization structure were inadequate for control, observation of many upper level managers leads one to doubt that this recognition is as well understood there.

3. Principle of Future Controls: Since the past cannot be changed, effective control should be aimed at preventing present and future deviations from plans.

This simple principle is often disregarded in practice, largely because managerial control has been so dependent upon accounting and statistical data, instead of forecasts and projections, and managers have been too much preoccupied with decimal accuracy, an accuracy which can only be attained—if at all—from history. Just as planning must be forward looking, so must control. It is fallacious, as is sometimes said, to regard planning as looking ahead and control as looking back. In the absence of any means to look forward, reference to history, on the assumption that past is prologue, is admittedly better than not looking at all. But no manager who would attempt to do an adequate job of control should be satisfied with using historical records, adequate as they are for tax collection and for the determination of stockholder dividends. It is simple to see that it does a manager little good to find out in August that he failed in June for something which occurred in March.

Ideally, a system of control should operate with instantaneous feed-back of deviations, like the servo system of an automated machine tool, so that the deviations are corrected before they occur by the simple means of correcting tendencies to stray from desired performance. With the lack of adequate servo-mechanisms for most managerial tasks, the next best thing would appear to be a careful kind of projection of performance far enough in advance to foresee problems so that action can be taken before the indicated deviation occurs. This is done now with cash forecasting by well managed firms and many are the firms who owe their solvent existence to foreseeing indicated cash shortages and solving them before they occurred.

This simple principle points the way toward an extremely fruitful area of research. There are unquestionably many areas of management where better servomechanisms could be developed to improve managerial control. Indeed, in this area particularly, much might be learned by the pooling of experience of successful managers.

4. Principle of Direct Control: The most effective technique of control in an enterprise is to assure the quality of subordinates, particularly managers.

In a very real sense, most controls used by managers today are based upon

the fact that human beings make mistakes. They are, therefore, really indirect controls. Unquestionably the best means of assuring that events will conform to plans is to take steps to assure the best possible quality of managers. The best managers make fewer mistakes, plan better and more thoroughly, establish clear and coordinated organization, do the best job of selecting and training subordinates, and most effectively direct the activities of subordinates.

Fayol perhaps perceived this when he said in 1925 that the best method of looking at an organization and determining the necessary improvements was "to study the administrative apparatus...One can ascertain immediately that forecasting and planning, organization, command, coordination, and control are properly provided for, that is to say that the undertaking is well administered." 14

This principle explains the tremendous interest, especially in the past decade, in managers and in manager development. It also seems to indicate that what is needed for the future is a careful and thorough audit of the quality of management. As a stockholder and corporate director, I would certainly find more use for a reliable certified management audit than a certified accounting audit, and I dare say, that such an audit would be a more important control device for owners or managers than any other in use today.

To the extent that I have succeeded in outlining major principles of planning and control and placing them in a logical framework, and as these or others may be expanded and refined, areas are defined where the most fruitful research in management planning and control can be undertaken. Whether my concept of these areas is correct or not, it seems to me that the sharpening of techniques and the development of information related to basic principles can clearly improve the understanding and practice of management. There are altogether too many areas of management where research results have been confusing, albeit extensive, due largely to a lack of a clear framework of principles.

If we were to realign our research efforts to broaden knowledge of principles and interpret this research in the light of principles, we could surely progress farther than has been done to date in developing a science of management. Too many management practitioners and researchers are so busily engaged in analyzing and recounting experience, without reflecting on what is fundamental in the job of managing and expressing this experience in these terms, that their findings tend to contribute only a hodgepodge of structureless facts. The present wide preoccupation with the managerial process and the importance of this process to the development of our society are too great to allow our intelligence and resources to be used so inefficiently.

¹⁴ Quoted by L. Urwick in his foreword to Fayol's General and Industrial Management, p. x.

THE USE OF CASES IN TEACHING MANAGEMENT PRINCIPLES

A Panel Discussion

Chairman: Professor Ronald Shuman, University of Oklahoma *

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Outline of remarks by Professor Ralph C. Davis, Ohio State University

1. What is a Business Case?

A statement of a problem situation in the field of Business Administration, together with a certain amount of data that concerns this situation. No statement of a case is ever complete. The amount of data that can be presented in the most "comprehensive" case is limited by the ability of the student group to cover it thoroughly in a two or three hour seminar. Such a case can not present completely the thought and effort of a number of staff departments perhaps over a period of two or three years, that was required to solve the problem in the particular company.

2. The Objectives in the Use of Cases

- a. A simulated executive situation in which the student has some opportunity to develop his ability to engage successfully in problem-solving thought.
- b. An experience in decision-making, based on his analysis of a body of data concerning the particular problem.
- c. An experience in exchanging viewpoints during the course of a simulated business conference.
- d. A broad approach to management problems that will enable him to examine them initially with respect to the general interests of the organization as a whole, as well as the interests of the particular line or staff groups that are concerned immediately with the problem. (A case approach can be used in studying the problems within a major staff field, of course.)

The above objectives are really certain values that are created by an accomplishment of the general objective of the case method; a contribution to the student's self-development of his capability for effective thinking.

3. The General Requirements of a Case

- a. The case should describe adequately the particular problem situation.
- b. The case should provide sufficient data to warrant some provisional conclusions concerning the significant difficulties that create the problem. They should provide a basis for some conclusions concerning the principal objectives,

policies, functions and limiting factors that are involved in the situation.

- c. The case should enable the student to decide;
- 1. What additional facts are required for a final decision, when elementary cases or case problems are used.
- 2. What facts are of primary significance in the problem, and what are not, when a comprehensive case is used.

It is recognized that "adequacy" or "sufficiency" depends on the purposes for which a case approach is used, and therefore on the background, experience, intelligence and maturity of the student group. The case should be reasonably realistic. It should recognize, then, that a business organization must do something about a major problem, if it is to remain competitive. It can not leave the problem floating around in the thin air of hazy conjecture.

4. What is the Case Method?

The case method may be any method of teaching management that makes use of cases for the accomplishment of the objectives that have been noted above. There is no such thing as "the" case method. A case is merely a pedagogical tool. It is only one of the tools in the kit of the management teacher. Each instructor uses cases in the manner that will enable him to accomplish those objectives of executive development that are appropriate for the group with which he is working. This manner is conditioned also by the background, training, experience and personality of the instructor who is leading the particular course, seminar or conference. Since the case is merely a tool, it should be designed for the job for which it is to be used. The method of using the tool also should be designed to accomplish the particular job, taking into account the characteristics and abilities of the workman.

5. Where Can Cases Be Used?

The function of management is mental work. It has to do largely with problem-solving thought. It results in business decisions and the exercise of executive leadership. Cases can be used, therefore, at any level of executive development, from the management courses for upper classmen in our colleges of commerce and administration, through seminars for graduate students in these colleges, to the executive development programs in our universities, professional management societies, and large corporations.

6. Kinds And Types of Cases

It follows that there are or should be degrees of development of the case, as a tool for management development. These degrees should correspond to the levels of management development that actually exist. The more common kinds and types of cases are;

- a. The simple problem,
- b. The case problem,
- c. The incident case,
- d. The specialized case, and,
- e. The comprehensive case.

These statements of problem situations become more complete, complex and broad, obviously, as the student of management progresses from the simple problem to the comprehensive case. They can be presented completely in written form, or orally with supporting written data. Some executive development programs for mature, experienced executives depend largely on oral statements of case experiences by the executives who are participating in the particular conference.

7. Cases Versus Texts.

Management cases and management texts are complementary rather than competing tools. The objective in the use of both tools is an improvement in the individuals ability to engage in effective thinking. There is no such thing as effective thinking in a mental vacuum. The process of effective thinking requires the raw material of some background and experience in the area of the problem. It must have been integrated previously into a practicable philosophy of management. Such a philosophy must supply an understanding of the objectives, principles, functions, factors and general methods of approach to the solution of the particular problem. It must be correlated with the facts concerning this problem situation. A case presents these facts. A case book can not be a substitute for a text book, accordingly. An attempt to develop a philosophy of management solely through the examination of cases would be a most inefficient process: It would involve the redevelopment of existing knowledges by inductive and deductive reasoning based on inadequate data concerning too few specific instances. The logic of such an approach can be questioned, certainly. It does not follow, of course, that texts should be used directly in management development for graduate students and mature executives. It may be presumed that such personnel have the necessary experience or at least have acquired an extensive background knowledge of objectives and other considerations in management, or both. Texts may still be helpful as references, however.

The best evidence that there can be no complete divorcement of texts and cases is found in actual practice: Many writers of "principles" books include simple problems or case problems at the end of each chapter; Many writers of "case" books include some statements of principles or other background material as a foreword for each chapter.

The Advantages and Disadvantages of the "Case Method"

The case method has many advantages and disadvantages. They will not be discussed by this panel member. His discussion has exceeded already any reasonable limits for an introductory statement.

* * * * * *

Remarks by Professor William H. Newman, Columbia University

Mr. Chairman:

- l. The extent and manner in which cases should be used depend upon the educational objectives of the particular course. Cases are simply one of a number of pedagogical tools available to the instructor. As Alvin Brown points out in the accompanying article, "The Case (or Bootstrap) Method", to assume that the discussion of cases is an end in itself evades a fundamental responsibility of university education. I personally make extensive use of cases in almost all of my courses, but the way in which they are used is adapted to the objectives of each particular course.
- 2. In courses which seek to develop knowledge and/or attitudes (to use Charlie Summer's framework), it is usually desirable to do two things:
 (a) develop an explicit statement of objectives and of "principles," and
 (b) use cases to give meaning and a feeling of the generalized concepts.
 The sequence in which the generalizations and the cases are introduced will vary. Nevertheless, it is my conviction that the learning process will be expedited by insisting that the generalizations be verbalized at some point. The capacity to think in terms of generalized statements is essential in executive development just as it is in the advance of civilization. At the same time, thinking in terms of concrete and realistic situations should be cultivated so that the generalizations take on significant meaning.
- 3. There is real question how far we should try to go in our college courses toward developing what Summer calls "abilities," i.e., skill, judgment, wisdom, and art. In some areas we can make a start, but most of such development as is possible will have to take place on the job after the student leaves the university. Cases of some sort live or embalmed, open—end or self—contained, etc. are, of course, essential for the development of skill and other types of abilities on the campus.
- 4. Cases themselves vary greatly in length, structure, content, and many other aspects. The kind of cases used in any particular course should be adapted to the objectives and also to the background of the particular students. The classroom method, e.g., role-playing, discussion of desirable management action, observation as a detached outsider, etc., will, of course, influence the type of cases which should be used. In other words, if cases are to make their full contribution toward achieving the objectives of the course, they should be very carefully selected.

* * * * * *

Comments by Dean William R. Spriegel, University of Texas

Mr. Moderator and Members of the Academy of Management:

So far as I am concerned my remarks could be summarized in one sentence, "I see no particular need for an extensive use of cases in the teaching of the

first course in the principles of management." To me there is a broader and more important question. How effective is the use of cases in teaching management?

To the broader question I am happy to direct my remarks. I would most certainly recommend the use of cases in the advanced courses in any phase of management. I would use them to a limited degree in the first courses in industrial management, personnel management, business organization, or motion and time study. It is true that one could teach the beginning courses solely by the case method just as chemistry can be taught solely by the laboratory method, but such a procedure would be a gross waste of the student's time.

For students with a background of principles that have been illustrated by short problems the longer cases that present business situations really make a contribution to business training. Their solution gives the student a vicarious experience and definitely influences his attitudes. It provides him with problem solving experiences that closely resemble the actual business experience. Cases to me are especially helpful in developing an attitude, a philosophy, and a point of view,

There is one aspect of teaching for which I do not see how one could possibly convey to the student a real understanding without the use of cases. This is the human relations phase of management. It is extremely difficult to develop in students an awareness of the role of sentiment in the absence of illustrative situations.

Cases also provide an opportunity for students to work as committees in their solution. One member of the committee then presents his findings to the class. With a class of 50 students I would have 10 committees. Each committee would prepare the case. I would then call on these committees on a random basis. It is not necessary to call on each committee every time. Because of the time consumed by the students to meet as committees to prepare their recommendations, I usually only ask for this type of preparation once a week. It has been my experience that committee consideration of cases provides excellent training for students.

May I summarize my remarks by saying that I do not recommend extensive use of long cases by undergraduates in teaching the first courses in the principles of management. Short problems to which the principles that have been studied may be applied are helpful in the beginning courses in the principles of management. Such problems would include wage payment plans, plant layout, job evaluation, motion and time study, purchasing, production control, and certain phases of personnel. For more advanced courses I heartily recommend the longer, more complicated cases. Should the more advanced course be taught to graduate students who had never had a beginning course in principles, I would recommend the reading of a principles book in connection with a study of the cases.

AGENDA FOR BUSINESS MEETING, ACADEMY OF MANAGEMENT

Western Reserve University, Cleveland, Ohio, December 28, 1956

1.	Report of Election of Officers for 1957	Dean Spriegel	
2.	Report of the Secretary-Treasurer	Professor Goetz	
3.	Reports of Committee Chairmen		
	A. Finance	Professor K. Davis	
	B. Membership	Professor Towle	
	C. Program	Mr. Brown	
	D. Research and Publications	Professor Mandeville	
4.	Report of Representatives to Council on Professional Education	Professor Mee	
5.	Report on Constitutional Amendments Vote	Professor Goetz	
6.	Report on Questionnaires About Time, Place, Duration and Kind of Meetings	Professor Goetz	
7.	Report of Fellows	Professor R. Davis	
8.	Report on Council for International Progress in Management	Professor Moore	
9.	Report on Incorporation	Professor Moore	
10.	New Business		
11.	Designation of Nominating Committee to propose slate for and conduct election of 1958 officers		

12. Announcement as to when new standing committee

14. Votes of thanks as may be appropriate

13. Any other business

chairmen and members may expect appointment

ACADEMY OF MANAGEMENT

Minutes - 1956

The 1956 business meeting of the Academy of Management was convened at 4:30 p.m. by President Franklin Moore at Western Reserve University in Cleveland.

Dean Spriegel, as chairman of the committee on nominations, reported that the following had been elected as officers for the year 1957:

President: Alvin Brown
Vice-President: Billy Goetz
Secretary-Treasurer: Joe Towle

The 1955 minutes were corrected to show adoption of the finance committee's recommendation that the Academy fiscal year end on November 30. Otherwise the minutes were approved as printed in the 1955 Proceedings.

The Secretary-Treasurer presented the financial report of the Academy showing \$1000 plus accrued interest on deposit in the Warren Institution for Savings in Boston, \$998.69 on deposit in the American National Bank of Chicago, and \$10 in cash on hand. This differs from the circulated financial statement of December 4, 1956 (appended to the minutes) because \$70 dues were collected in December and \$5.24 was paid out for postage and envelopes.

The following reports were submitted and are appended to these minutes:

Chairman Keith Davis for the Finance Committee
Chairman Joe Towle for the Membership Committee
Chairman Alvin Brown for the Program Committee
Chairman M. J. Mandeville for the Research and Publications
Committee

Professor Mee as Representative to the Council on Professional Education

Chairman Mandeville's recommendation for increasing the publications of the Academy was returned to the committee for further study. Dean Spriegel suggested a very tentative approach, preferably beginning as additional material included with our regular annual Proceedings. It seemed to be the concensus that quality be maintained at a high level, that no commitment be made as to frequency or amount of added publication, and that content be restricted to genuine contributions to the teaching of management and to research in management. The Academy authorized expenditures not to exceed \$500 for such additional publication, leaving the how and when to the discretion of the Committee on Publications and the Executive Committee.

The Secretary reported that of 96 votes on amending the Constitution, 84 were unqualifiedly in favor of the draft circulated. The revised Constitution is included in this Proceedings. The Secretary also reported 9 objections to Article II, Section 1, and recommended that it be reviewed to see if it cannot be further improved.

The Secretary also reported on the meeting time, place, and program questionnaire.

In In	favor favor	of of	Xmas meetings September meetings Spring meetings June meetings	45 28 14 6
			two-day meetings one-day meetings	47 37

Since only a plurality favored Xmas meetings, it was decided to circulate another, more specific questionnaire to resolve these questions.

Professor Ralph Davis reported on a change in the By-laws of the Fellows, and that in accordance with the revised by-laws, the following had been elected to Fellow status:

John R. Beishline	University of Texas
Keith Davis	Indiana University
Austin Grimshaw	University of Washington
Merten J. Mandeville	University of Illinois
Clark E. Myers	Ohio University

President Moore reported on CIPM-CIOS. The Academy can become a sponsoring society at a cost of \$50 per year. The matter was referred to the Executive Committee for decision, with power to act.

President Moore reported that incorporation of the Academy would "protect the name" only in the state in which it was incorporated. A suggestion was made that the possibility of Federal incorporation be investigated.

President-elect Alvin Brown postponed appointment of committee chairmen and nominating committee until he could confer with his Executive Committee.

The \$100 which the Academy has appropriated to help defray expenses of an interim West Coast meeting was continued for the year 1957. It was suggested that a West Coast meeting might be held in September in conjunction with the meeting of West Coast economists.

The Academy directed its Secretary-Treasurer to convey its appreciation for the excellent arrangements for the 1956 meeting made available by Western Reserve University and Professor Cummings.

The meeting adjourned at 6:00 p.m.

REPORT OF THE MEMBERSHIP COMMITTEE

December 28, 1956

During 1956 there were 38 new applications for membership in the Academy received, processed and accepted. Four additional applications were received and have been partially processed. For the entire year, then, the Academy will accept 42 new members. One of these new members is a business man qualified for membership. He is Mr. Harold Smiddy, Vice-President in-charge-of Management Consultant Services for the General Electric Company. All others are university professors.

E. H. Anderson

Clark Myers

Frank Gilmore

Joseph W. Towle, Chairman

REPORT OF THE FINANCE COMMITTEE

December 28, 1956

Keith Davis, Chairman

Your finance committee has examined the savings passbook, checkbook, and related treasurer's records, and reports that the accounts are in balance and as stated in the annual treasurer's report.

There are no special recommendations.

ACADEMY OF MANAGEMENT

RECEIPTS AND DISBURSEMENTS

Balance December 29, 1955 1954 dues paid in 1956 1955 dues paid in 1956 1956 dues paid in 1956 1957 dues paid in 1956	1 20 123 1	\$1,571.55 5.00 100.00 615.00 5.00
Total		\$2,296.55

Disbursements

Expenses at	Columbia	\$ 30.00
Letterheads		17.00
Proceedings	Postage	11.90
Proceedings	Printing	232.00
Surety Bond		5.00
Meeting Anno	ouncements Postage	10.00
Constitution	Duplicating and Postage	46.72

	352.6	2
\$1,	943.9	3

BALANCE SHEET

December 4, 1956

\$1,943.93 30.00 215.00
\$2,188.93

Paid 1956 1956 dues	dues (2 in 1955) not paid	125
Emeriti	6	
	Total members	174

REPORT OF THE RESEARCH AND PUBLICATIONS COMMITTEE

December 28, 1956

In the report made to the Academy at the 1955 meeting the recommendation was made that serious consideration be given to the publication of a Journal of Management that would appeal particularly to the special interests of the members. Further thought has been given to this suggestion and this year the committee has more definite suggestions to make concerning the type of publication it deems desirable.

It is recommended that a Journal of Management be established on a rather modest scale, possibly similar in scope and format to the Bulletin of the American Business Law Association, which had its first issue in March, 1956. It is believed that the articles published should be primarily those which deal with the teaching of management subjects, curriculum building and scholarly discussions of interest to students of management. Later on it may be well to devote some space to learned and scholarly articles of a theoretical or research nature, but this should be left for the future to determine. The major objective of the Journal at the beginning should be to serve as a means of communication on teaching problems in the area with which the members of the Academy are mostly concerned. With this in mind, the Journal should contain a section of personal notes on activities and movements of members, but it is the belief of the committee that book reviews should not be included.

With a membership of about two hundred, the Academy should not attempt an elaborate publication. A simple, mimeographed booklet of forty or fifty pages, issued about twice a year, should suffice as a start. In such a pamphlet there would be no advertisements. If there is a demand for a more comprehensive magazine at some future date it will not be difficult to change at that time.

The committee should also like to urge a more active sponsorship of research projects by the Academy. We recommend that funds for the financing of the publication of two or three monographs a year be solicited from foundations or companies. These monographs should be selected from graduate theses in the field of Management, submitted by members of the Academy and should be considered as prizes for excellence. While they would be labeled Academy of Management Monographs, they would, of course, give credit to the author and the university submitting them. In addition, the Academy should look forward to the financing of more elaborate research projects when the value of the results seems to warrant the expense. This type of research might be restricted to Academy of Management members and detailed outlines prepared in advance.

Submitted at the annual meeting of the Academy of Management on December 28, 1956.

Keith Davis
Dalton E. McFarland
Merten J. Mandeville, Chairman

REPORT FROM REPRESENTATIVE TO COUNCIL FOR

PROFESSIONAL EDUCATION FOR BUSINESS

December 28, 1956

- 1. The Council For Professional Education For Business is presently giving primary attention and effort to the problem of recruitment and professional training of competent professors for the collegiate Schools of Business. A suitable brochure or pamphlet is being prepared for presentation to seniors or juniors of outstanding scholastic ability by Deans, Department Heads or Major Professors. The purpose of the brochure is to encourage qualified men and women to consider careers in the academic profession and seek information about graduate work in business.
- 2. This spring the Council will write to Deans of Schools of Business and Heads of Departments of Business Administration encouraging them to take whatever action they can to recruit and interest qualified seniors for graduate work in business and subsequent careers in college teaching in business.
- 3. The Council is exploring the possibility of a clearing agency for the use of Business School Administrators who may wish to consider retiring candidates for teaching positions from governmental or military occupations.

John F. Mee

ACADEMY OF MANAGEMENT

CONSTITUTION

ARTICLE I - The Name of the Association

1. The association name shall be "The Academy of Management".

ARTICLE II - Objectives

1. The Academy is founded to foster the search for truth and the general advancement of learning through free discussion and research in the field of management.

The interest of the Academy lies in the theory and practice of management, both administrative and operative. It is concerned also with the theory and practice of operative management as it relates to the work of planning, organizing and controlling the execution of business projects. It is also concerned with activities having to do with the forming, directing and coordinating of departments and groups which are characteristic of administrative management. It is not concerned primarily with specialized procedures for the control and execution of particular kinds of projects that are significant chiefly in narrow segments of a business field.

- 2. The general objectives of the Academy shall be therefore to foster:
- (a) A philosophy of management that will make possible an accomplishment of the economic and social objectives of an industrial society with increasing economy and effectiveness. The public's interests must be paramount in any such philosophy, but adequate consideration must be given to the legitimate interests of Capital and Labor.
- (b) Greater understanding by Executive Leadership of the requirements for a sound application of the scientific method to the solution of managerial problems, based on such a philosophy.
- (c) Wider acquaintance and closer cooperation among those interested in the development of a philosophy and science of management.

ARTICLE III - Functions

- 1. The principal functions of the Academy shall include the following:
- (a) Sponsoring original researches in the field of management as may be seem desirable and are in keeping with the general purposes of the Academy.

- (b) Providing a forum for the presentation and discussion of problems in the field of management as may seem desirable and are in keeping with the general purposes of the Academy.
- (c) Encouraging or securing the publication of worthy papers of an original nature, dealing with the philosophy of management and such related fields of applied management as may seem desirable and are in keeping with the general purposes of the Academy.
- (d) Cooperating with other societies in activities that promote the objectives of the Academy.
- (e) Performing such activities as are required to serve as the recognized representative of management education in academic circles.
- (f) Contributing to the improvement of the teaching of management in American universities and abroad.
- (g) Carrying on such other activities as may be compatible with the objectives of the Academy.

ARTICLE IV - Membership

- 1. The Academy shall have one class of general membership. Within the membership of the Academy there shall be a group known as Fellows of the Academy of Management. This group shall be self-perpetuating. Paragraph Four (4) below establishes the criteria for designation of future Fellows of the Academy of Management.
- 2. The basic requirements for membership in the Academy which shall govern the selection of new members are as follows:
- (a) The candidate shall be interested and engaged in advancing the theory and philosophy of management through teaching, research, or publication. The mere possession of an important position in business, government, or an educational organization shall not confer eligibility for membership per se.
 - (b) The candidate shall be:
- (1) A teacher of management in a college or university and hold professorial rank or equivalent (assistant professor, associate professor, professor, research professor, or distinguished professor); or
- (2) A business or government executive who has made a contribution to management theory or philosophy in published form.
- 3. Application for membership in the Academy shall be filed with the Chairman of the Membership Committee. Election to membership in the Academy

shall be in accordance with procedures to be established from time to time by the Membership Committees to carry out the intent expressed in the purpose and membership qualifications articles of the Constitution, and in agreement with such stipulations as may appear in the By-Law of the Academy.

- 4. Designation of a member as a Fellow of the Academy shall be in accordance with the By-Laws and procedures to be established from time to time by current Fellows at their annual meeting; provided that the Fellows shall be governed by the following criteria in their selection of new Fellows:
- (a) The basic requirement for eligibility to be designated a Fellow shall be evidence of a substantial contribution to the accomplishment of the objectives stated in Article II above, normally evidenced by one or more of the following accomplishments:
- (1) The candidate shall have been principally responsible for a major piece of productive scholarship in the field of management, or
- (2) He has been principally responsible for a major development of management practice that has a broad general significance in business, or
- (3) He has published a <u>significant</u> contribution to management in some recognized management journal, or in book form.
- 5. A Member will automatically become a Member Emeritus whenever the following conditions have been fulfilleds
- (a) Continuous, fully paid membership in the Academy for the ten years immediately preceding qualification as a Member Fmeritus.
- (b) Retirement from regular gainful employment as a teacher, consultant, or manager due to reaching retirement age of 65 or due to poor health.
- (c) A Member Emeritus will have all the privileges of a Member except that of paying dues.

ARTICLE V - Officers and Duties

- 1. The officers of the Academy shall be a President, a Vice-President, a Secretary and a Treasurer, although the same person may be both Secretary and Treasurer at the same time.
- 2. The President shall preside at all meetings of the Academy, but may delegate this responsibility at his discretion. He shall have whatever authority may be required for the management of the Academy's affairs during the interim between its annual meetings, except that he may not encroach on any specific grants of authority that may be made hereafter by this Constitution to particular officers or committees. He shall present a report of the status

and progress of the Academy at the annual meeting.

3. The Vice-President shall act for the President in his absence or disability, and shall perform such duties as may be assigned him by the President or by this Constitution hereinafter.

4. The Secretary-Treasurer shall:

- (a) As Secretary, keep the minutes of all business meetings of the Academy, and all records, except those of a financial nature. He shall perform such other duties as may properly be assigned to a secretary of a learned society, as specified by the By-Laws.
- (b) As Treasurer, shall be responsible for the funds of the Academy. The Treasurer shall issue checks, shall collect dues from the membership, shall keep complete and accurate books of account showing all receipts and disbursements, shall present a financial report of the Academy's affairs at its annual meeting, and shall perform such other duties as may pertain to his office. The Treasurer of the Academy shall be bonded in sufficient and adequate amount for the protection of the Academy.

ARTICLE VI - Election and Tenure

- 1. The officers of the Academy shall be nominated by a nominating committee appointed by the President. This committee shall prepare a slate of officers. It must also list on the ballot the names of members nominated by a petition signed by not fewer than ten members of the Academy.
- 2. The officers of the Academy shall be elected to office for terms of one year by mail ballot in advance of the annual meeting. The results of the election shall be announced at the annual meeting at the close of which the new officers shall take office. A majority of the ballots returned shall be sufficient to elect.
- 3. With the exception of the Secretary-Treasurer, no national officer of the Academy shall be eligible for more than one successive election to the same office, but after the lapse of one year any officer may be again nominated for the office.

ARTICLE VII - Amendments

- 1. This Constitution may be amended at any time by a two-thirds vote of the members voting, but not less than 25 per cent of the members in good standing. This vote shall be taken by mail, under conditions that will insure the secrecy and accuracy of the vote. Any ten members of the Academy may by written request cause the Executive Committee to take a ballot on proposed amendments.
 - 2. Any proposals to amend this Constitution must be submitted to the

members at least thirty days before the closing date for the ballot. A report of the results of the ballot must be made at the next annual meeting of the Academy.

ARTICLE VIII - By-Laws

- 1. The conduct of the Academy's business shall be governed by the by-
- 2. The provisions of the by-laws may not conflict with the provisions of this Constitution, from which they derive their sanction.

ARTICLE IX - Relations with Other Organizations

l. The Academy must have an independent existence to achieve its objectives. Therefore, no action shall be taken for the purpose of merging or affiliating the Academy with any other society or organization. Cooperation with other societies is desirable. But it must not lead to the submergence of the Academy in the activities of these societies.

BY-LAWS

ARTICLE I - Committees

l. The standing committees of the Academy shall be the Executive Committee, the Program Committee, the Publications and Research Committee, the Finance Committee, and the Membership Committee. The President shall be exofficio, a member of all committees and chairman of the Executive Committee. With the exception of the Executive Committee, the membership of each standing committee shall consist of not less than three nor more than five members.

The President shall appoint all committee chairmen for the current year within thirty days after taking office. He shall appoint for the current year all committee members on the recommendation of the chairman of the particular committee. Members of standing committees shall hold as such for one year or until properly appointed successors have been named.

The President may appoint with the advice of the Executive Committee such special committees as he may believe are necessary. The life of all such committees shall expire with the completion of the specified assignment or at the end of the current year.

2. The Executive Committee shall be composed of the President of the Academy, the Vice-President of the Academy, the Secretary-Treasurer of the Academy, and Chairmen of all the standing committees of the Academy. All

policies of the Academy must be approved by the Committee. Any important questions of policy interpretation or application shall be submitted by the President to the Committee for its recommendation.

In the case of extraordinary conditions, such as a national emergency, rendering one or more annual meetings as impracticable, the current Executive Committee is charged with responsibility for maintenance and preservation of the Academy, its finances, and records until a new set of officers has been elected and new committee chairmen have been appointed. (The Executive Committee may not obligate the Academy for indebtedness in addition to that already existing in excess of unincumbered funds in the Treasury.)

- 3. It shall be the duty of the Finance Committee to advise the officers of the Academy with respect to the handling of funds and endowments and to conduct a full and efficient audit of the finances of the Academy each year, a report of which shall be furnished the members at the annual meeting of the Academy.
- 4. The Program Committee shall be responsible for planning, organizing, and staging the annual meeting of the Academy, and such special meetings as may be called by the President with the approval of the Executive Committee. The Program Committee will secure papers and speakers, determine the time and place of the meeting, and perform such other duties as may be required by its responsibility. The Vice-President shall act, ex-officio, as Program Chairman.
- 5. The Publications and Research Committee shall pass on manuscripts submitted for publication, determining whether they meet the requirements of an original contribution of a fundamental nature. It shall edit these manuscripts before publication by the Academy, or make arrangements to have them edited.

The Committee may arrange for and sponsor publication, by university agency, provided the status of the document, as a publication of the Academy of Management, shall appear on the printed transcript of it. Such other publication may be arranged or undertaken by this Committee including the establishment of an official Academy journal, as may be approved by majority vote of the members present at any annual meeting. The responsibility for preparing, publishing, and distributing such official journal shall rest with the Committee. Such of these functions may be delegated to an Editorial Board as may seem desirable.

The Committee shall consider and make recommendation to the Executive Committee or to the membership of the Academy on all problems relating to research projects which are brought forward by members or others.

6. The Membership Committee shall review all membership applications that are received from the Secretary-Treasurer in the light of the requirements for and criteria of eligibility for membership that have been established in Article IV of the Academy's Constitution.

A two-thirds majority of the Membership Committee must approve of a candidate's qualification before his name can be submitted to the President with a statement that he meets the membership requirements specified in Article IV of the Constitution. The President shall notify the Secretary-Treasurer of all new members approved by the Membership Committee. The chairman of the Membership Committee shall be responsible for getting the approval or disapproval of his committee members on all candidates making application and for notifying the President of all action taken by his committee.

The Secretary-Treasurer shall report immediately to the Academy membership the names of candidates elected to membership. If no protest from a member is received within two weeks from the date of mailing the notice, the candidates shall be considered to have been elected. In the event of a protest, the name of the candidate protested shall be submitted to the general membership for a mail ballot.

The Secretary-Treasurer shall notify all candidates who make application for membership to the Academy of either their election to membership or their failure to meet membership qualifications.

7. The designation of "Fellow of the Academy of Management" shall be by a two-thirds majority of those voting in an authorized ballot mailed to the group known as Fellows among the membership of the Academy.

Any Fellow in the Academy may submit the name of a member of the Academy to be designated a "Fellow of the Academy" at the regular annual meeting of Fellows of the Academy of Management.

The annual meeting of the Fellows shall either precede or follow the annual meeting of the Academy. For each annual meeting of the Fellows, a chairman shall be elected to preside over the meeting. The chairman shall appoint a secretary who shall be responsible for the records until the next meeting. Until a chairman is elected, the eldest Fellow present shall preside.

- 8. The chairmen of all standing committees shall report to the President and shall render annually a report of the activities and accomplishments of their committees. Such report shall be made known to the members of the Academy by publication in the annual proceedings.
- 9. The majority of the voting members officially registered as present and in good standing shall constitute a quorum of all business meetings of the Academy. The Academy shall hold at least one business meeting each year, unless prevented by national emergency.

ARTICLE II - Dues

l. Annual dues of the Academy of Management shall be set by the Executive Committee.

- 2. The Academy fiscal year shall run from December 1 to November 30.
- 3. Dues cover a fiscal year and are not prorated for fractions of years.
- 4. A Member more than two years in arrears in payment of dues shall be dropped from the Academy.
- 5. A former Member, dropped for nonpayment of dues may be reinstated upon payment of current year's dues plus payment of dues for the immediately preceding year.

ARTICLE III - Amendments

1. Amendment of the by-laws shall be by a two-thirds vote of the members present at an annual meeting or by a majority vote of all members (voting) through a mail ballot (sponsored by the Executive Committee of the Academy).

AMENDMENTS

Constitution

Article VI, paragraph 1 - 1951 Annual Meeting Article III, paragraphs le and 1f - 1953 Annual Meeting Article IV, paragraphs 3, 4 and 7 - 1953 Annual Meeting Article I, paragraph 1 - 1956 Annual Meeting Article II, paragraphs 1 and 2 - 1956 Annual Meeting Article IV, paragraphs 1, 2 and 4 - 1956 Annual Meeting Article V, paragraphs 1 and 3 - 1956 Annual Meeting

By-Laws

Article I, paragraphs 6 and 7 - 1953 Annual Meeting Article I, paragraphs 2, 4, 7, and 8 - 1956 Annual Meeting Article II, paragraphs 1, 2, 3, 4 and 5 - 1956 Annual Meeting

